



COPY OF PAPERS  
ORIGINALLY FILED

Attorney's Docket No.: 08326-051002

313-

#7

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Britton Chance

Art Unit : 3737

Serial No. : 09/924,152

Examiner : Unknown

Filed : August 7, 2001

Title : EXAMINATION OF A BIOLOGICAL TISSUE USING PHOTON MIGRATION  
BETWEEN A PLURALITY OF INPUT AND DETECTION LOCATIONS

Commissioner for Patents

Washington, D.C. 20231

RECEIVED  
MAR 10 2002  
TO 3100 BELL ROOM

INFORMATION DISCLOSURE STATEMENT

Applicant submits the references listed on the attached form PTO-1449.

Under 35 USC §120, this application relies on the earlier filing date of application serial number 09/170,833, filed on October 13, 1998. The attached list of references were submitted to and/or cited by the Office in the prior application and, therefore, are not provided in this application

This statement is being filed before the receipt of a first Office Action on the merits.

Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date:

Feb. 13, 2002

John N. Williams  
Reg. No. 18,948

Fish & Richardson P.C.  
225 Franklin Street  
Boston, Massachusetts 02110-2804  
Telephone: (617) 542-5070  
Facsimile: (617) 542-8906

20387253.doc

CERTIFICATE OF MAILING BY FIRST CLASS MAIL

I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner for Patents, Washington, D.C. 20231.

Date of Deposit

February 13, 2002

Signature

Toni M. Sousa

Toni M. Sousa

Typed or Printed Name of Person Signing Certificate

FORM PTO-1449(Modified) LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT	ATTY. DOCKET NO.: 08326/051001	SERIAL NO.: 09/170,833
	APPLICANT: Britton CHANCE	
	FILING DATE: October 13, 1998	GROUP: —

U.S. PATENT DOCUMENTS

Exam Init	Ref Des	Document No.	Date	Name	Class	Sub Class	FILING DATE If Appropriate
		4,129,125	Dec. 1978	Lester et al.	128	2.05R	
		4,223,680	Sep. 1980	Jobsis	128	633	
		4,224,948	Sep. 1980	Cramer et al.	128	690	
		4,281,645	Aug. 1981	Jobsis	128	633	
		4,321,930	Mar. 1982	Jobsis et al.	128	633	
		4,515,165	May 1985	Carroll	128	664	
		4,576,173	Mar. 1986	Parker et al.	128	633	
		4,700,708	Oct. 1987	New, Jr. et al.	128	633	
		4,714,341	Dec. 1987	Hamaguri et al.	356	41	
		4,773,422	Sep. 1988	Isaacson et al.	128	633	
		4,807,637	Feb. 1989	Bjorkholm	128	633	
		4,824,242	Apr. 1989	Frick et al.	356	41	
		4,836,207	Jun. 1989	Bursell et al.	128	663	
		4,846,183	Jul. 1989	Martin	128	633	
		4,869,254	Sep. 1989	Stone et al.	128	633	
		4,908,762	Mar. 1990	Suzuki et al.	128	633	
		4,926,867	May 1990	Kanda et al.	128	633	
		4,951,682	Aug. 1990	Petre	128	713	
		4,972,331	Nov. 1990	Chance	128	633	
		5,062,431	Nov. 1991	Potter	128	665	
		5,088,493	Feb. 1992	Giannini et al.	128	633	
		5,090,415	Feb. 1992	Yamashita et al.	128	665	
		5,122,974	Jun. 1992	Chance	128	633	
		5,158,090	Oct. 1992	Waldman et al.	128	664	
		5,174,298	Dec. 1992	Dolfi et al.	128	665	
		5,203,339	Apr. 1993	Knuttel et al.	128	665	
		5,213,105	May 1993	Gratton et al.	128	664	
		5,257,202	Oct. 1993	Fedderson et al.	364	498	
		5,309,907	May 1994	Fang et al.	128	633	
		5,309,912	May 1994	Knuttel	128	653.1	
		5,353,799	Oct. 1994	Chance	128	664	
		5,416,582	May 1995	Knutson et al.	356	349	
		5,664,574	Sep. 1997	Chance	128	664	
		5,673,701	Oct. 1997	Chance	128	664	
		5,807,263	Sep. 1997	Chance	600	476	
		5,820,558	Oct. 1998	Chance	600	472	

FORM PTO-1449 (Modified) PATENT & TRADEMARK OFFICE MAR 05 2002	ATTY. DOCKET NO.: 08326/051001	SERIAL NO.: 09/170,833
	APPLICANT: Britton CHANCE	
	FILING DATE: October 13, 1998	GROUP: —

## FOREIGN PATENT DOCUMENTS

Country & Doc. No. (11)	Pub. Date (43)	Class	Sub Class	Translation Yes No
EP 0 102 816	Mar. 1984			
EP 0 099 756	Jan. 1984			
WO 92/20273	Nov. 1992			
GB 2 068 537	Aug. 1981			
WO 84/04665	Dec. 1984			
WO 92/13598	Aug. 1992			
WO 97/20494	Jun. 1997			
WO 93/ 25145	Dec. 1993			

## OTHER ART

(Including Author, Title, Date, Pertinent Pages, Publication, Etc.)

	Arridge et al., "Reconstruction Methods for Infra-red Absorption Imaging," SPIE, vol. 1431:204, 1991.
	Barlow, et al., "Breast Biopsy Analysis By Spectroscopic Imaging," p. 111, Plenum Press, New York 1989.
	Brochure, Becton Dickinson, "Cardio-Green® (CG®) HW&D Brand of Sterile Indocyanine Green," USP, Apr. 1981.
	Chance, "The Future of Time Resolved Spectroscopy and Imaging," Aug. 5-10, 1990 Japan.
	Coleman et al., "Cardiac Output by Dye Dilution in the Conscious Rat," Journal of App. Physiology, 37:452, 1974.
	Cui et al., "Experimental Study of Migration Depth of the Photons Measured At Sample Surface," SPIE 1431:180 1991.
	Fishkin et al., "Diffusion of Intensity Modulated Near-Infrared Light in Turbid Media," SPIE 1431:122, 1991.
	Gratton et al., "The Possibility of a Near Optical Imaging System Using Frequency Domain Methods In Mind Brain Imaging Program," Aug. 5-10, 1990 Japan.
	Greenfeld, et al., "A Tissue Model For Investigating Photon Migration In Trans-Cranial Infrared Imaging," p. 147, Plenum Press (New York) 1989.
	Grunbaum et al., "Diffuse Tomography," SPIE 1431:232, 1991.
	Haida et al., "A Method to Estimate the Ratio of Absorption Coefficients of Two Wavelengths Using Phase-Modulated Near Infrared Light Spectroscopy," Analytical Biochemistry, vol. 208, pp. 348-351, 1993.
	Oda et al., "Non-Invasive Hemoglobin Oxygenation Monitor and Computerized Tomography of NIR Spectrometry," SPIE 1431:284, 1992.
	Sevick et al., "Analysis of Absorption, Scattering and Hemoglobin Saturation Using Phase Modulation Spectroscopy," SPIE 1431:264, 1991.
	Sevick et al., "Photon Migration in a Model of the Head Measured Using Time-and-Frequency-Domain Techniques Potentials of Spectroscopy and Imaging," SPIE 1431:84, 1991.

FORM PTO-1449 (Modified)  LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT	ATTY. DOCKET NO.: 08326/051001	SERIAL NO.: 09/170,833
	APPLICANT: Britton CHANCE	
	FILING DATE: October 13, 1998	GROUP: —

**OTHER ART (continued)**  
(Including Author, Title, Date, Pertinent Pages, Publication, Etc.)

		Sevick et al., "Quantitation of Time-and Frequency-Resolved Optical Spectra for the Determination of Tissue Oxygenation," Analytical Biochemistry 195:330-351, 1991.
		Singer et al., "Image Reconstruction of the Interior of Bodies that Diffuse Radiation," Science 228:990, 1990.
		Yamashita et al., "The Neonate Brain (NIR) and Breast Imaging Transillumination Photon Migration in Tissues," Plenum Press, New York, p. 55, 1989.

RECEIVED  
MAR 13 2002  
LC 3100 MAIL ROOM

EXAMINER	DATE CONSIDERED
----------	-----------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered.  
Include copy of this form with next communication to applicant